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**Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/088,707 06/02/98 BERTELO

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EXAMINER

MULLIS, J

ART UNIT

PAPER NUMBER

1711

5

DATE MAILED:

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/088,707**

Applicant(s)  
**Bertelo et al.**

Examiner  
**Jeffrey Mullis**

Group Art Unit  
**1711**



☒ Responsive to communication(s) filed on 6-2-98; 9-3-98

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-34 and 36-46 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-34 and 36-46 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☒ received in Application No. (Series Code/Serial Number) 08/738,768.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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The title of this case contains the word "CORN (sic, CORE)".  
Correction is required.

Applicants' Abstract is not in the form of a single  
paragraph. Correction is required.

Applicants' amendment to the claims of 6-2-98 contains  
numerous instances of the word "claim" in which the c is a lower  
case c. Applicants' amendment has been entered by capitalizing  
the word "claim". Claims 13, 14, 15 and 17 have been amended by  
indicating replacement of the term "either of" when in fact the  
term which appears in the claim is "one of". Applicants'  
amendment in these claims however has been entered by replacing  
the term "one of" with the indicated material rather than "either  
of". Claims 37-39 contain the ungrammatical phrase "a impact  
additive". Correction is required.

The term "which is of a vinyl group" is ungrammatical.  
Correction is required.

Claim 29 lacks a period. Correction is required.

Claim 33 contains a number of periods. For instance there  
is a period before the word "A" in the first line. Also there  
are two periods between the first and second lines in claim 33.  
Correction is required.

Claims 1-34 and 36-46 are rejected under 35 U.S.C. 112,  
second paragraph, as being indefinite for failing to particularly

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point out and distinctly claim the subject matter which applicants regard as the invention.

It is not clear if the phrase "not more than 80%" embraces 0% in that while 0 is not more than 80%, applicants' remarks indicate that the instant claims recite the impact additive of the parent case. However the impact additive of the parent case recites that component a2 is present in greater than an amount of 0%.

The term "type" renders any claim that this term appears in unclear in that the term "type" is subjective. Note for instance claim 1 recites "core/shell type". It is believed that other claims also contain this term.

Claim 29 is unclear in that "butylene terephthalate" is not a polycondensate. Presumably "poly(butylene terephthalate)" is what is intended. However this is not what is stated.

The "impact resistance additive according to claim 41" as recited in claim 44 lacks antecedent basis in claim 41 in that claim 41 is drawn to a composition, not an impact resistance additive.

Claim 44 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

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Claim 44 does not further limit claim 41 in that claim 44 is drawn only to a particular feature of claim 41 and therefore does not further limit claim 41. It is noted that claim 41 is drawn to a composition and not merely the impact resistance additive.

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ 2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 44 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 5,773,520. Although the conflicting claims are not identical, they are not patentably distinct from each other because manipulation of the percentages of material "A2" would have been obvious to a practitioner having ordinary skill in the art at the time of the invention in that it requires only routine experimentation to find the optimum or workable range of a result effective variable absent any showing of surprising or unexpected results.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28-34 and 36-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Ayoama et al. (USP 5,360,865).

Ayoama in Example 1 discloses preparation of a core-shell graft copolymer with cross-linked core, covering and graft moieties. The cross-linked core is obtained by polymerization of N-octyl acrylate in the presence of a cross-linking agent corresponding to the claimed agent. The formation of a cross-linked core is followed by shell polymerization of a "cover" onto the cross-linked core. The cover contains N-octyl acrylate and allyl methacrylate. Then a moiety derived from methyl

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methacrylate and styrene are grafted onto the core-shell polymer obtained in the previous stage. All of the limitations to the amounts of the monomers, cross-linking agents and relative amounts of core, shell and graft moieties disclosed by the patentee appears to correspond to the claimed amounts.

Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayoama et al., cited above.

Note that patentees at column 6 lines 1-14 disclose that vinyl compounds and halogenated vinylidene compounds may be graft copolymerized. As those skilled in the art will understand, some homopolymer is formed during graft copolymerization and embodiments in which comonomers are used in the grafting process would invariably contain some homopolymer in the matrix. Thus those skilled in the art would understand that copolymerization of halogenated vinyl compounds would result in a graft impact modifier combination with some halogenated vinyl polymer. Furthermore it was widely known at the time of the invention that polyvinyl chloride which was not modified in any way was a fairly brittle material. Therefore this material would have been viewed by those of ordinary skill in the art at the time of the invention to benefit from impact modification. Furthermore it was widely known at the time of the invention that polyvinyl chloride was a fairly cheap material and that engineering

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thermoplastics such as polycarbonate which is used by Ayoama et al. tended to be more expensive than most common resins.

Ayoama et al. do not disclose any examples in which the thermoplastic used is polyvinyl chloride.

It would have been obvious to a practitioner having ordinary skill in the art at the time of the invention to use polyvinyl chloride instead of polycarbonate in the composition of patentees motivated to reduce cost absent any showing of surprising or unexpected results. Furthermore it would have been obvious to a practitioner having ordinary skill in the art at the time of the invention to introduce some vinyl chloride polymer by polymerization of vinyl chloride given that patentees disclose that halogenated vinyl monomers may be copolymerized by the expectation that some homopolymer would form (or at least non-graft copolymer) absent any showing of surprising or unexpected results.

The instant claims can be made allowable over the prior art by amending the independent claims to recite that component A2 is present in an amount of greater than 0% by weight but not more than 80% by weight. Claim 44 would have to be amended to recite a composition such that this claim further limits claim 41.

Applicants' arguments filed 6-2-98 have been fully considered but they are not deemed to be persuasive.



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Applicants' argument that claims 28-34 and 41-46 should be allowable since they are based on impact additives which are allowed in the parent application is not agreed with in that the parent application specifically recites that component "A2" is present in an amount of greater than 0%. Such a limitation is not present in these claims.

With regard to applicants' argument that polyvinyl chloride is distinctly different than polycarbonate, this may well be true. However the mere fact that a material is distinctly different from another does not necessarily confer patentability in that differences alone do not necessarily lead one of ordinary skill in the art away from a particular invention. In any case as set out above, applicants may render the instant claims allowable (including claims 1-27 and 37-40) over the prior art by reciting that component "A2" is present in an amount of greater than 0%.

Any inquiry concerning this communication should be directed to Jeffrey Mullis at telephone number (703) 308-2820.

J. Mullis:cdc

September 25, 1999

JEFFREY C. MULLIS  
PRIMARY EXAMINER  
GROUP 1200 1/7/1

